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	LIS, MN 55440-1022		ART UNIT	PAPER NUMBER	
	•		2162		
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Please find below and/or attached an Office communication concerning this application or proceeding.

		App	lication No.	Applicant(s)				
Office Action Summary		10/	727,183	CINA, MIROSLA	CINA, MIROSLAV			
		Exa	miner	Art Unit				
		Сап	n Y T. Truong	2162				
Period fo	The MAILING DATE of this commun or Reply	nication appears	on the cover sheet	with the correspondence ac	ddress			
WHIC - Externafter - If NO - Failu Any	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE N nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum signer to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE (s of 37 CFR 1.136(a). In munication. tatutory period will apply will, by statute, cause	OF THIS COMMUN n no event, however, may y and will expire SIX (6) Mo the application to become	NICATION. a reply be timely filed DNTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).				
Status								
1)□	Responsive to communication(s) file	ed on						
		2b)⊠ This actio	n is non-final					
3)								
,—	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims	·	• •	,				
4) 🖂	4)⊠ Claim(s) <u>1-38</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
· —	Claim(s) <u>1-38</u> is/are rejected.							
7)								
8)	_							
Applicati	on Papers							
9)□	The specification is objected to by th	e Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)⊡ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119			·				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
ŕ	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment	(s)							
1) Notice	e of References Cited (PTO-892)		4) Interview	Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (F nation Disclosure Statement(s) (PTO-1449 or			o(s)/Mail Date Informal Patent Application (PT0	D-152)			
Paper	No(s)/Mail Date	1 10/38/00)	6) Other: _					

DETAILED ACTION

1. Claims 1-38 are pending in this Office Action.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The word "may" in claim 1, line 8; in claim 31, line 9 is being indefinite for failing to particularly point out distinctly claim the subject matter which applicant regards as the invention.

Claims 2-8, 32-33 are dependent on claims 1 and 31; thus, they are rejected under the same rational.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-8, 14-25, and 31-38 are rejected under 35 U.S.C.101 because the language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practice application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

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As regarding claim 1:

Claims 1-8, 14-18, 22-25, 31-38 recite "a method or computer program product".

However, the claims fails to contain a concrete, useful, and tangible result so as to

realize its functionality. Thus, the bodies of claims are merely abstract idea and is being

processed without any links to a practical result in the technology arts and without

computer manipulation.

Claims 19-21 recite "a system". However, these claims fail to contain a computer

or a hardware that is used to implement the system so as to produce a concrete, useful,

and tangible result and to realize its functionality. Thus, the bodies of these claims are

merely abstract idea and are being processed without any links to a practical result in

the technology arts and without computer manipulation.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-21 and 26-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner et al (or hereinafter "Brenner") (US 2002/0078119) in view of Walker (US 2004/0220933).

As to claims 1, 31, Brenner teaches the claimed limitations:

associating a lock level with a particular process, a higher lock level representing a larger number of other processes having priority over the particular process in accessing the table (paragraphs [0020, 0050]);

repeatedly attempting to associate the particular process with a lower lock level, and if the particular process has been successfully associated with the lower lock level, releasing a previous lock level associated with the particular process so that the previous lock level may be associated with other processes (paragraph [0053]); and

allowing the particular process to access the table when the lock level for the particular process is equal to a preset value (paragraphs [0053, 0048]).

Brenner does not explicitly teach the claimed limitation "the table".

Walker teaches updating data in a database that is represented as the table (paragraph 0005).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply Walker's teaching of updating data in a database that is represented as the table to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 2 and 32, Brenner teaches the claimed limitations in which the preset value is equal to one (paragraphs [0053, 0048]).

As to claims 3 and 33, Brenner teaches the claimed limitations "in which each of the processes attempts to associate itself with a lower lock level independently of other processes" as (paragraphs [0050; 0054]).

As to claim 4, Brenner teaches the claimed limitations "further comprising storing in a queue information indicating which process is associated with which lock level" as (paragraphs [0050-0052]).

As to claim 5, Brenner teaches the claimed limitations "calling multiple instances of a procedure that associates a lock level with a process, each instance of the procedure associated with one of the multiple processes and is configured to attempt to associate a different lock level with the process until the process is granted access to the record" as (paragraphs [0050-0052], fig. 1).

As to claim 6, Brenner teaches the claimed limitations "allowing processes to read the record but not modify the record when the lock levels for the processes are different from the preset value" as (paragraph 0054, fig. 3).

As to claim 7, Brenner teaches the claimed limitations "locking the record when the lock level having the preset value is associated with a process" as (paragraphs [0048, 0053], fig. 3).

As to claim 8, Brenner teaches the claimed limitations "in which at least two of the processes are being run in a parallel processing environment" as (paragraph [0018]).

As to claims 9 and 26, Brenner teaches the claimed limitations:

upon receiving a request from a first process to access a record in a database, associating a first lock level to the first process and allowing the first process to access the record, preventing other processes from accessing the record until the first process finishes accessing the record (paragraph [0059]);

upon receiving a request from a second process to access the record while the first process is still accessing the record, associating a second lock level to the second process (paragraphs [0053-0050]);

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"when the first process finishes accessing the record, releasing the first lock level and either (a) releasing the second lock level from being associated with the second process and associating the first lock level with the second process, allowing the second process to access the record but preventing other processes from accessing the record until the second process finishes accessing the record, and when the second process finishes accessing the first lock level from being associated with the second process, or (b) releasing a lock level from being associated with a third process and associating the first lock level with the third process, allowing the third process to access the record but preventing other processes from accessing the record until the third process finishes accessing the record, and when the third process finishes accessing the record, releasing the first lock level from being associated with the third process (paragraphs [0053, 0050], fig. 3]).

Brenner does not explicitly teach the claimed limitation "database".

Walker teaches updating data in a database that is represented as the table (paragraph 0005).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply Walker's teaching of updating data in a database that is represented as the table to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 10 and 27, Brenner teaches the claimed limitation "in which preventing other processes from accessing the record comprises allowing the other processes to read the record but not modify the record" as (fig. 3, paragraph [0054]).

As to claims 11 and 28, Brenner teaches the claimed limitation "locking the record when the first lock level is associated with a process" as (fig. 3, paragraph [0054]).

As to claims 12 and 29, Brenner teaches the claimed limitation "writing to a queue to specify which lock level is associated with which process" as (paragraph [0054], fig. 3).

As to claims 13 and 30, Brenner teaches the claimed limitation "in which at least two of the first, second, and third processes are being run in a parallel processing environment" as (paragraph [0018]).

As to claims 14 and 34, Brenner teaches the claimed limitation:

locking a record in a database at multiple levels when multiple processes running in parallel attempt to access the record (paragraphs [0018, 0048]);

assigning a lock level to each of the multiple processes, different processes having different lock levels (paragraph [0053]); and

selectively permitting one of the multiple processes to access the record at a time (paragraph [0054]).

Brenner does not explicitly teach the claimed limitation "database".

Walker teaches updating data in a database that is represented as the table (paragraph 0005).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply Walker's teaching of updating data in a database that is represented as the table to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 15 and 35, Brenner teaches the claimed limitation "reassigning the lock levels of the processes when a process accessing the record terminates its access to the record" as (paragraphs [0069-0070]).

As to claims 16 and 36, Brenner teaches the claimed limitation "in which a process that attempted to access the record earlier than another process is assigned a lower lock level than the other process, and each process other than the process terminating its access to the record is assigned a lower lock level when the process terminates its access to the record" as (paragraphs [0053, 0054]).

As to claims 17 and 37, Brenner teaches the claimed limitation "storing in a queue information indicating which process is associated with which lock level" as (fig. 2).

As to claims 18 and 38, Brenner teaches the claimed limitation "calling multiple instances of a procedure that assigns a lock level to a process, each instance of the procedure associated with one of the multiple processes and is configured to attempt to assign a different lock level to the process until the process is granted access to the record" as (paragraphs [0050-0052]).

As to claim 19, Brenner teaches the claimed limitations:

to store records (paragraph [0018]); and

a queue to store information relating to lock levels of processes that attempt to access the records, different processes having different lock levels when accessing the same record, one of the processes having a particular lock level being allowed to access the record (paragraphs [0053, 0050]).

Brenner does not explicitly teach the claimed limitation "database".

Walker teaches updating data in a database that is represented as the table (paragraph 0005).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply Walker's teaching of updating data in a database that is represented as the table to Brenner's system in order to lock a database for

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performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claim 20, Brenner teaches the claimed limitation "a memory to store software code for implementing a procedure in which instances of the procedure are used to assign lock levels to the processes" as (paragraphs [0050-0052]).

As to claim 21, Brenner teaches the claimed limitation "in which the software code is configured so that the instances of the procedure are run in parallel" as (paragraph [0018]).

8. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egolf (US 2002/0083063) in view of Chan et al (or hereinafter "Chan") (US 6108654).
As to claim 22, Egolf teaches the claimed limitations:

lock a record in a database at a first level to allow a first process to modify the record but prevent other processes from modifying the record as (paragraphs [0028; 0030]); and I

lock the record at a second level to allow a second process to modify the record after the record is unlocked at the first level but to prevent other processes from modifying the record while the record is being modified by the second process (paragraph [0028, 0033], figs. 4&5).

Egolf does not explicitly teach the claimed limitation "modify records".

Chan teaches writing to resources (col. 6, lines 35-40).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Mohan's teaching of updating data source to Egolf's system in order to provide a new up to date records to a user for future processing.

As to claim 23, Egolf teaches the claimed limitation "operable to cause the one or more programmable processors to, after the record is locked at the second level, check whether the record is locked at the first level, and if the record is not locked at the first level, lock the record at the first level a second time and unlocking the record at the second level" as (paragraphs [0045-0046).

As to claim 24, Egolf teaches the claimed limitation "instructions operable to cause the one or more programmable processors to write to a queue to specify that the record has been locked at the first level and/or the second level" as (paragraphs [0045-0046]).

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Egolf (US 2002/0083063) in view of Chan et al (or hereinafter "Chan") (US 6108654) and further in view of Bernner.

As to claim 25, Egolf does not explicitly teach the claimed limitation "instructions operable to cause the one or more programmable processors to run the first and second processes in parallel".

Brenner teaches run the processes at the same time (paragraph [0018]).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Brenner's teaching of run the processes at the same time to Egolf's system in order to save time reading/accessing records in a database.

10. Claims 1-21 and 26-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner et al (or hereinafter "Brenner") (US 2002/0078119) in view of Chan et al (or hereinafter "Chan") (US 6108654).

As to claims 1 and 31, Brenner teaches the claimed limitations:

associating a lock level with a particular process, a higher lock level representing a larger number of other processes having priority over the particular process in accessing the table (paragraphs [0020, 0050]);

repeatedly attempting to associate the particular process with a lower lock level, and if the particular process has been successfully associated with the lower lock level, releasing a previous lock level associated with the particular process so that the previous lock level may be associated with other processes (paragraph [0053]); and

allowing the particular process to access the table when the lock level for the particular process is equal to a preset value (paragraphs [0053, 0048]).

Brenner does not explicitly teach the claimed limitation "the table".

Chan teaches locking a table of a database for updating (col. 1, lines 55-67).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply locking a table of a database for updating to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 2 and 32, Brenner teaches the claimed limitations in which the preset value is equal to one (paragraphs [0053, 0048]).

As to claim 3, Brenner teaches the claimed limitations "in which each of the processes attempts to associate itself with a lower lock level independently of other processes" as (paragraphs [0050; 0054]).

As to claim 4, Brenner teaches the claimed limitations "further comprising storing in a queue information indicating which process is associated with which lock level" as (paragraphs [0050-0052]).

As to claim 5, Brenner teaches the claimed limitations "calling multiple instances of a procedure that associates a lock level with a process, each instance of the procedure associated with one of the multiple processes and is configured to attempt to associate a different lock level with the process until the process is granted access to the record" as (paragraphs [0050-0052], fig. 1).

As to claim 6, Brenner teaches the claimed limitations "allowing processes to read the record but not modify the record when the lock levels for the processes are different from the preset value" as (paragraph 0054, fig. 3).

As to claim 7, Brenner teaches the claimed limitations "locking the record when the lock level having the preset value is associated with a process" as (paragraphs [0048, 0053], fig. 3).

As to claim 8, Brenner teaches the claimed limitations "in which at least two of the processes are being run in a parallel processing environment" as (paragraph [0018]).

As to claims 9 and 26, Brenner teaches the claimed limitations:

upon receiving a request from a first process to access a record in a database, associating a first lock level to the first process and allowing the first process to access the record, preventing other processes from accessing the record until the first process finishes accessing the record (paragraph [0059]);

upon receiving a request from a second process to access the record while the first process is still accessing the record, associating a second lock level to the second process (paragraphs [0053-0050]);

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"when the first process finishes accessing the record, releasing the first lock level and either (a) releasing the second lock level from being associated with the second process and associating the first lock level with the second process, allowing the second process to access the record but preventing other processes from accessing the record until the second process finishes accessing the record, and when the second process finishes accessing the first lock level from being associated with the second process, or (b) releasing a lock level from being associated with a third process and associating the first lock level with the third process, allowing the third process to access the record but preventing other processes from accessing the record until the third process finishes accessing the record, and when the third process finishes accessing the record, releasing the first lock level from being associated with the third process (paragraphs [0053, 0050, fig. 3]).

Brenner does not explicitly teach the claimed limitation "the table".

Chan teaches locking a table of a database for updating (col. 1, lines 55-67).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply locking a table of a database for updating to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 10 and 27, Brenner teaches the claimed limitation "in which preventing other processes from accessing the record comprises allowing the other processes to read the record but not modify the record" as (fig. 3, paragraph [0054]).

As to claims 11 and 28, Brenner teaches the claimed limitation "locking the record when the first lock level is associated with a process" as (fig. 3, paragraph [0054]).

As to claims 12 and 29, Brenner teaches the claimed limitation "writing to a queue to specify which lock level is associated with which process" as (paragraph [0054], fig. 3).

As to claims 13 and 30, Brenner teaches the claimed limitation "in which at least two of the first, second, and third processes are being run in a parallel processing environment" as (paragraph [0018]).

As to claims 14 and 34, Brenner teaches the claimed limitation:

locking a record in a database at multiple levels when multiple processes running in parallel attempt to access the record (paragraphs [0018, 0048]);

assigning a lock level to each of the multiple processes, different processes having different lock levels (paragraph [0053]); and

selectively permitting one of the multiple processes to access the record at a time (paragraph [0054]).

Brenner does not explicitly teach the claimed limitation "database".

Chan teaches locking a table of a database for updating (col. 1, lines 55-67).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply locking a table of a database for updating to Brenner's system in order to lock a database for performing any updating without other applications potentially attempting to update the same portion of the database at the same time.

As to claims 15 and 35, Brenner teaches the claimed limitation "reassigning the lock levels of the processes when a process accessing the record terminates its access to the record" as (paragraphs [0069-0070]).

As to claims 16 and 36, Brenner teaches the claimed limitation "in which a process that attempted to access the record earlier than another process is assigned a lower lock level than the other process, and each process other than the process terminating its access to the record is assigned a lower lock level when the process terminates its access to the record" as (paragraphs [0053, 0054]).

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As to claims 17 and 37, Brenner teaches the claimed limitation "storing in a queue information indicating which process is associated with which lock level" as (fig. 2).

As to claims 18 and 38, Brenner teaches the claimed limitation "calling multiple instances of a procedure that assigns a lock level to a process, each instance of the procedure associated with one of the multiple processes and is configured to attempt to assign a different lock level to the process until the process is granted access to the record" as (paragraphs [0050-0052]).

As to claim 19, Brenner teaches the claimed limitations:

to store records (paragraph [0018]); and

a queue to store information relating to lock levels of processes that attempt to access the records, different processes having different lock levels when accessing the same record, one of the processes having a particular lock level being allowed to access the record (paragraphs [0053, 0050]).

Brenner does not explicitly teach the claimed limitation "database".

Chan teaches locking a table of a database for updating (col. 1, lines 55-67).

It would have been obvious to a person of and ordinary skill in the art at the time the invention was made to apply locking a table of a database for updating to Brenner's system in order to lock a database for performing any updating without other

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applications potentially attempting to update the same portion of the database at the same time.

As to claim 20, Brenner teaches the claimed limitation "a memory to store software code for implementing a procedure in which instances of the procedure are used to assign lock levels to the processes" as (paragraphs [0050-0052]).

As to claim 21, Brenner teaches the claimed limitation "in which the software code is configured so that the instances of the procedure are run in parallel" as (paragraph [0018]).

11. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egolf (US 2002/0083063) in view of Mohan et al (or hereinafter "Mohan") (US551046) As to claim 22, Egolf teaches the claimed limitations:

lock a record in a database at a first level to allow a first process to modify the record but prevent other processes from modifying the record as (paragraphs [0028; 0030]); and I

lock the record at a second level to allow a second process to modify the record after the record is unlocked at the first level but to prevent other processes from modifying the record while the record is being modified by the second process (paragraph [0028, 0033], figs. 4&5).

Egolf does not explicitly teach the claimed limitation "modify records".

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Mohan teaches updating data source (col. 2, lines 50-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Mohan's teaching of updating data source to Egolf's system in order to provide a new up to date records to a user for future processing.

As to claim 23, Egolf teaches the claimed limitation "operable to cause the one or more programmable processors to, after the record is locked at the second level, check whether the record is locked at the first level, and if the record is not locked at the first level, lock the record at the first level a second time and unlocking the record at the second level" as (paragraphs [0045-0046).

As to claim 24, Egolf teaches the claimed limitation "instructions operable to cause the one or more programmable processors to write to a queue to specify that the record has been locked at the first level and/or the second level" as (paragraphs [0045-0046]).

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Egolf (US 2002/0083063) in view of Mohan et al (or hereinafter "Mohan") (US 551046) and further in view of Bernner.

As to claim 25, Egolf does not explicitly teach the claimed limitation "instructions operable to cause the one or more programmable processors to run the first and second processes in parallel".

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Brenner teaches run the processes at the same time (paragraph [0018]).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Brenner's teaching of run the processes at the same time to Egolf's system in order to save time reading/accessing records in a database.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dias et al (US 5161227).

Shoens et al (US 4965719).

Vickik (US 5737611).

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Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cam Y Truong Primary Examiner Art Unit 2162

6/24/2006